

Claims

1. A trocar sleeve, comprising
a housing,
a shaft projecting from a distal side of said housing,
a sealing made of an elastic material, said sealing being provided for sealing an instrument inserted into said trocar sleeve in a gas-tight manner versus a proximal direction of said sealing,
said sealing having a disk-shaped portion extending transversally to a longitudinally axis of said trocar sleeve,
a central opening being provided in said disk-shaped portion of said sealing, said central opening having a smallest diameter in a first, not yet stretched rest position of said sealing, and
a spreading device for stretching said elastic material of said sealing in a manner to enlarge said diameter of said central opening,
said spreading device comprising a sleeve being movable along said longitudinal axis of said trocar sleeve, a ring-shaped facial end of said movable sleeve resting on said disk-shaped portion of said sealing.
2. The trocar sleeve of claim 1, wherein said ring-shaped facial end of said movable sleeve is arranged coaxially to said central opening in said disk-shaped portion of said sealing, said central opening being circle-shaped.

3. The trocar sleeve of claim 1, wherein said sealing has a pot-shaped body, said central opening being provided in a bottom of said pot-shaped body, and said movable sleeve being insertable into said pot-like body for stretching said bottom thereby enlarging said diameter of said central opening.

4. The trocar sleeve of claim 3, wherein said pot-shaped body of said sealing and said movable sleeve are arranged in said housing.

5. The trocar sleeve of claim 1, wherein said spreading device being fixable in different positions which different positions correspond to differently enlarged diameters of said central opening of said sealing.

6. The trocar sleeve of claim 1, wherein a guide is provided for guiding a displacing movement of said spreading device, and wherein locking means are provided for interlocking said spreading device in different displacing positions.

7. The trocar sleeve of claim 6, wherein said guide comprises a slot-link guide, a slidable member is guided within said slot-link guide.

8. The trocar sleeve of claim 7, wherein said slot-link guide is configured as a heart curve guiding said spreading device between a zero position without stretching and spreading said sealing and a position of a maximum stretching said sealing and with intermediate spreading positions being between said zero position and said maximum stretching position.

9. The trocar sleeve of claim 6, wherein said spreading device comprises an actuation member which can be activated from an outer side of said trocar sleeve.

10. The trocar sleeve of claim 9, wherein said actuation member is configured as a lever being pivotable about an axis extending transversally to said longitudinally extending trocar sleeve axis.

11. The trocar sleeve of claim 10, wherein said lever is provided with a pin, said pin acts as said movable member moving along said slot-link guide.

12. The trocar sleeve of claim 11, wherein said pin being forced by a spring.